

CIDE-B Antibody

Catalog # ASC10054

Specification

CIDE-B Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes WB <u>O70303</u> <u>AF041377</u>, <u>3114593</u> Mouse Rabbit Polyclonal IgG 25 kDa KDa CIDE-B antibody can be used for detection of CIDE-B by Western blot 0.5 μg/mL. An approximately 25 kDa band can be detected.

CIDE-B Antibody - Additional Information

Gene ID 12684 Other Names CIDE-B Antibody: CIDE-B, AI790179, 1110030C18Rik, Cell death activator CIDE-B, Cell death-inducing DFFA-like effector B, cell death-inducing DNA fragmentation factor, alpha subunit-like effector B

Target/Specificity Cideb; It has no cross activity to CIDE-A.

Reconstitution & Storage

CIDE-B antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

CIDE-B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CIDE-B Antibody - Protein Information

Name Cideb {ECO:0000303|PubMed:26733203, ECO:0000312|MGI:MGI:1270844}

Function

Lipid transferase specifically expressed in hepatocytes, which promotes unilocular lipid droplet formation by mediating lipid droplet fusion (PubMed:26733203). Lipid droplet fusion promotes their enlargement, restricting lipolysis and favoring lipid storage (PubMed:26733203). Localizes on the lipid droplet surface, at focal contact sites between lipid droplets, and mediates atypical lipid



droplet fusion by promoting directional net neutral lipid transfer from the smaller to larger lipid droplets (By similarity). The transfer direction may be driven by the internal pressure difference between the contacting lipid droplet pair (By similarity). Promotes lipid exchange and lipid droplet fusion in both small and large lipid droplet- containing hepatocytes (PubMed:26733203). In addition to its role in lipid droplet fusion, also involved in cytoplasmic vesicle biogenesis and transport (PubMed:19187774, PubMed:23297397, PubMed:30858281). Required for very-low-density lipoprotein (VLDL) lipidation and maturation (PubMed:19187774, PubMed:23297397). Probably involved in the biogenesis of VLDL transport vesicles by forming a COPII vesicle coat and facilitating the formation of endoplasmic reticulum-derived large vesicles (PubMed:23297397). Also involved in sterol-regulated export of the SCAP-SREBP complex, composed of SCAP, SREBF1/SREBP1 and SREBF2/SREBP2, by promoting loading of SCAP-SREBP into COPII vesicles (PubMed:30858281). May also activate apoptosis (PubMed:9564035).

Cellular Location

Lipid droplet. Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus. Cytoplasmic vesicle, COPI-coated vesicle Note=Enriched at lipid droplet contact sites

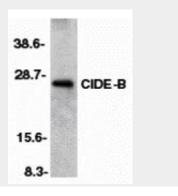
Tissue Location Highly enriched in the liver.

CIDE-B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CIDE-B Antibody - Images





Western blot analysis of CIDE-B in mouse liver tissue lysate with CIDE-B antibody at 1:500 dilution.

CIDE-B Antibody - Background

CIDE-B Antibody: Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. These death signals finally cause the degradation of chromosomal DNA by activated DNase. DFF45/ICAD has been identified as inhibitor of caspase activated DNase DFF40/CAD. DFF45 related proteins CIDE-A and CIDE-B (for cell death-inducing DFF-like effector A and B) were recently identified. CIDE contains a new type of domain termed CIDE-N, which has high homology with the regulatory domains of DFF45/ICAD and DFF40/CAD. Expression of CIDE-B induces apoptosis, which is inhibited by DFF45. CIDE-B is a DFF45-inhibitable effector that promotes cell death and DNA fragmentation. CIDE-B is expressed mainly in liver and at lower levels in spleen, kidney, peripheral blood lymphocytes, and bone marrow.

CIDE-B Antibody - References

Inohara N, Koseki T, Chen S, Wu X, Nunez G. CIDE, a novel family of cell death activators with homology to the 45 kDa subunit of the DNA fragmentation factor. EMBO J 1998;17:2526-33 Inohara N, Koseki T, Chen S, Benedict MA, Nunez G. Identification of regulatory and catalytic domains in the apoptosis nuclease DFF40/CAD. J Biol Chem 1999 ;274:270-4 (RD1299)